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P.O. Box 1450  
Alexandria, VA 22313-1450

*Susan A. Hickey*  
Buchanan Ingersoll, P.C.  
*February 16, 2004*  
Date

## PATENT APPLICATION

### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appln. No. : 10/717,106  
Applicant : R.W. HYLAND, JR., et al.  
Filed : November 19, 2003  
Title : PHOTOLUMINESCENT ALKALINE EARTH ALUMINATE  
AND METHOD FOR MAKING THE SAME  
  
Group Art Unit :  
Examiner :  
  
Docket No. : 020838

### INFORMATION DISCLOSURE STATEMENT

Pittsburgh, Pennsylvania 15219  
February 16, 2004

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

Pursuant to the provisions of 37 C.F.R. Sections 1.56, 1.97 and 1.98, Applicant submits the documents listed on the attached PTO Form SB/08A for consideration during prosecution of the above-captioned patent application filed on November 19, 2003. Applicant hereby requests the Examiner to review and make an independent evaluation of the art.

This statement is made solely for the purpose of compliance with the above-identified rules and is not intended to be a substitute for an independent search by the Examiner and no representation of any such nature is made or intended by this statement.

In accordance with Section 1.97(b)(1), this statement is being submitted within three (3) months of the filing date.

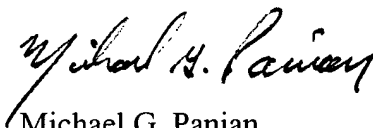
All but two (2) of the cited references are in the English language.

Japanese Patent references 56-2116 (Shibaura) and 56-152883 (Shibauri) are cited of record in U.S. Patent No. 5,424,006. Shibauri includes an English language abstract and was cited as disclosing a Ba-Mg aluminate phosphor doped with Eu and Mn (Fig. 3) that would be phosphorescent.

Shibaura was cited as disclosing the use of Mg in conjunction with Ba and Mn in conjunction with Eu in Eu doped alkaline earth aluminate phosphors.

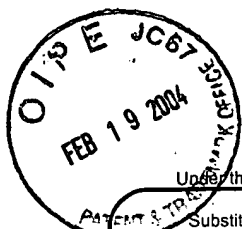
Also enclosed is a return postcard. Please date stamp and mail the postcard to acknowledge receipt of the above-mentioned correspondence.

Respectfully submitted,



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PTO/SB/08A (08-03)

Approved for use through 07/31/2006. OMB 0651-0031

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**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

**Complete if Known**

|                        |                   |
|------------------------|-------------------|
| Application Number     | 10/717,106        |
| Filing Date            | November 19, 2003 |
| First Named Inventor   | R.W. Hyland, Jr.  |
| Art Unit               |                   |
| Examiner Name          |                   |
| Attorney Docket Number | 020838            |

Sheet 1 of 3

**U. S. PATENT DOCUMENTS**

| Examiner<br>Initials* | Cite<br>No. <sup>1</sup> | Document Number                          | Publication<br>Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines, Where<br>Relevant Passages or Relevant<br>Figures Appear |
|-----------------------|--------------------------|--|-----------------------------------|--|---|
|                       |                          | Number-Kind Code <sup>2</sup> (if known) |                                   |  |   |
|                       |                          | US- 3,294,699                            | 12-27-1966                        | H. Lange   |   |
|                       |                          | US- 3,502,592                            | 03-24-1970                        | R.L. Amster  |   |
|                       |                          | US- 3,595,802                            | 07-27-1971                        | G. Blasse  |   |
|                       |                          | US- 4,216,408                            | 08-05-1980                        | Verstegen, et al.                                  |   |
|                       |                          | US- 4,524,300                            | 06-18-1985                        | Rutten, et al.                                     |   |
|                       |                          | US- 4,644,223                            | 02-17-1987                        | de Hair, et al.                                    |   |
|                       |                          | US- 4,795,588                            | 01-03-1989                        | Pet, et al.  |   |
|                       |                          | US- 4,806,825                            | 02-21-1989                        | Catherall, et al.                                  |   |
|                       |                          | US- 5,273,681                            | 12-28-1993                        | Srivastava   |   |
|                       |                          | US- 5,376,303                            | 12-27-1994                        | Royce, et al.                                      |   |
|                       |                          | US- 5,424,006                            | 06-13-1995                        | Murayama, et al.                                   |   |
|                       |                          | US- 5,644,193                            | 07-01-1997                        | Matsuda, et al.                                    |   |
|                       |                          | US- 5,686,022                            | 11-11-1997                        | Murayama, et al.                                   |   |
|                       |                          | US- 5,698,301                            | 12-16-1997                        | Yonetani   |   |
|                       |                          | US- 5,770,111                            | 06-23-1998                        | Moriyama, et al.                                   |   |
|                       |                          | US- 5,811,174                            | 09-22-1998                        | Murakami   |   |
|                       |                          | US- 5,879,586                            | 03-09-1999                        | Kitamura, et al.                                   |   |
|                       |                          | US- 5,885,483                            | 03-23-1999                        | Hao, et al.  |   |
|                       |                          | US- 6,117,362                            | 09-12-2000                        | Yen, et al.  |   |

**FOREIGN PATENT DOCUMENTS**

| Examiner<br>Initials* | Cite<br>No. <sup>1</sup> | Foreign Patent Document   | Publication<br>Date<br>MM-DD-YYYY | Name of Patentee or<br>Applicant of Cited Document | Pages, Columns, Lines,<br>Where Relevant Passages<br>Or Relevant Figures Appear | T <sup>6</sup> |
|-----------------------|--------------------------|---|-----------------------------------|--|---|----------------|
|                       |                          | Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known) |                                   |  |   |                |
|                       |                          | EPO 0 094 132   | 11-16-1983                        | Hoeks, et al.                                      |   |                |
|                       |                          | Japan 56-2116   |                                   | Shibaura   |   |                |
|                       |                          | Japan 56-152883   |                                   | Shibauri   |   |                |
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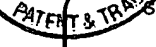
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## U. S. PATENT DOCUMENTS

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## FOREIGN PATENT DOCUMENTS

[illegible]

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|-----------------------|--|--------------------|--|
| Examiner<br>Signature |  | Date<br>Considered |  |
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Sheet 3 of 3

**Complete if Known**

Application Number 10/717,106

Filing Date November 19, 2003

First Named Inventor R.W. Hyland, Jr.

Art Unit

Examiner Name

Attorney Docket Number 020838

**NON PATENT LITERATURE DOCUMENTS**

| Examiner<br>Initials* | Cite<br>No. <sup>1</sup> | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of<br>the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue<br>number(s), publisher, city and/or country where published. | T <sup>2</sup> |
|-----------------------|--------------------------|---|----------------|
|                       |                          | KINZO NONOMURA, HIDETAKA HIGASHINO, and RYUICHI MURAI,<br>"Plasma Display Materials," MRS Bulletin, November 2002, pp. 898-902  |                |
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